

**§ 190.10**

period in which he is engaged in carrying out any operation which is part of a nuclear fuel cycle.

(l) *Regulatory agency* means the government agency responsible for issuing regulations governing the use of sources of radiation or radioactive materials or emissions therefrom and carrying out inspection and enforcement activities to assure compliance with such regulations.

**Subpart B—Environmental Standards for the Uranium Fuel Cycle**

**§ 190.10 Standards for normal operations.**

Operations covered by this subpart shall be conducted in such a manner as to provide reasonable assurance that:

(a) The annual dose equivalent does not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public as the result of exposures to planned discharges of radioactive materials, radon and its daughters excepted, to the general environment from uranium fuel cycle operations and to radiation from these operations.

(b) The total quantity of radioactive materials entering the general environment from the entire uranium fuel cycle, per gigawatt-year of electrical energy produced by the fuel cycle, contains less than 50,000 curies of krypton-85, 5 millicuries of iodine-129, and 0.5 millicuries combined of plutonium-239 and other alpha-emitting transuranic radionuclides with half-lives greater than one year.

**§ 190.11 Variances for unusual operations.**

The standards specified in §190.10 may be exceeded if:

(a) The regulatory agency has granted a variance based upon its determination that a temporary and unusual operating condition exists and continued operation is in the public interest, and

(b) Information is promptly made a matter of public record delineating the nature of unusual operating conditions, the degree to which this operation is expected to result in levels in excess of the standards, the basis of the vari-

ance, and the schedule for achieving conformance with the standards.

**§ 190.12 Effective date.**

(a) The standards in §190.10(a) shall be effective December 1, 1979, except that for doses arising from operations associated with the milling of uranium ore the effective date shall be December 1, 1980.

(b) The standards in §190.10(b) shall be effective December 1, 1979, except that the standards for krypton-85 and iodine-129 shall be effective January 1, 1983, for any such radioactive materials generated by the fission process after these dates.

**PART 191—ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR MANAGEMENT AND DISPOSAL OF SPENT NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES**

**Subpart A—Environmental Standards for Management and Storage**

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- 191.01 Applicability.
- 191.02 Definitions.
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- 191.04 Alternative standards.
- 191.05 Effective date.

**Subpart B—Environmental Standards for Disposal**

- 191.11 Applicability.
- 191.12 Definitions.
- 191.13 Containment requirements.
- 191.14 Assurance requirements.
- 191.15 Individual protection requirements.
- 191.16 Alternative provisions for disposal.
- 191.17 Effective date.

**Subpart C—Environmental Standards for Ground-Water Protection**

- 191.21 Applicability.
- 191.22 Definitions.
- 191.23 General provisions.
- 191.24 Disposal standards.
- 191.25 Compliance with other Federal regulations.
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APPENDIX A TO PART 191—TABLE FOR SUBPART B

APPENDIX B TO PART 191—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE

APPENDIX C TO PART 191—GUIDANCE FOR IMPLEMENTATION OF SUBPART B